

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Armor USA, Inc.

Kentucky Manufacturing Assistance Center

KMAC Transfers Lean Benefits to Ink Ribbon Manufacturer

Client Profile:

ARMOR USA is a manufacturer of thermal transfer films typically used in digital printers for overprinting tags and labels with variable data and also in direct package over printers. Located in Hebron, Kentucky, ARMOR is a subsidiary of the French-based ARMOR Group, a world leader in the field of thermal transfer technology since 1983. Established in 1999, ARMOR serves the American, Canadian and Mexican markets and also provides the Central and South American markets through ARMOR's Latin American subsidiary. The company employs 50 people.

Situation:

ARMOR produces mostly to customer demand, with frequent small runs resulting in numerous line changeovers. These changeovers were resulting in an estimated average of 25 to 50 percent of production time. Also, with a very high material cost, a secondary concern of ARMOR was the amount of scrap produced from these changeovers, about 8 percent. After ARMOR's plant manager, Jim Hubbard, attended a Lean Manufacturing public workshop conducted by Kentucky Manufacturing Assistance Center (KMAC), a NIST MEP network affiliate, the company began more detailed discussions with KMAC on their specific concerns for improvement.

Solution:

To assist ARMOR in improving their line capacity and save on material costs, KMAC proposed implementing a proven, standard, systematic program to reduce changeover times and scrap. Led by Senior Manufacturing Business Advisor Jerry Duncan, KMAC provided a thorough analysis of their situation, followed by classroom training and shop-floor implementation on three (3) components of Lean Manufacturing: Changeover Reduction, 5S Workplace Organization, and Cellular/Flow Manufacturing

Results:

- * Increased capacity and production.
- * Reduced defect rate.
- * Improved employee skills and work environment.
- * Improved profit margin.
- * Increased sales by \$1,000,000.
- * Reduced materials/other expenses by \$300,000.
- * Saved more than 1 percent of annual costs.
- * Increased sales per employee by 10 to 20 percent.
- * Achieved a more competitive and profitable position.

Testimonial:

www.mep.nist.gov



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"KMAC was very important in providing us with the tools to become a more competitive and profitable operation by helping us learn and implement Lean Manufacturing techniques. Their personnel are not only very knowledgeable and experienced, but they are very easy to work with and aren't afraid to get on the shop floor and get their hands dirty. As a measure of the success of our lean partnership with KMAC, we have commissioned their services on an on-going basis with planned events throughout the year. They will also assist us with the planning of our factory expansion due in the summer of 2004."

Chris Walker, VP & General Manager